

Title (en)  
OPERATION INPUT UNIT AND ELECTRONIC DEVICE USING SAME

Title (de)  
OPERATIONSEINGABEEINHEIT UND ELEKTRONISCHE EINRICHTUNG DAMIT

Title (fr)  
UNITE D'ENTREE DE FONCTIONNEMENT ET DISPOSITIF ELECTRONIQUE UTILISANT CELLE-CI

Publication  
**EP 1936648 A4 20080910 (EN)**

Application  
**EP 06811619 A 20061011**

Priority  
• JP 2006320312 W 20061011  
• JP 2005296591 A 20051011

Abstract (en)  
[origin: EP1936648A1] A thin operation input unit in which a high sensitivity characteristic of a magnetic field sensor is effectively utilized. The operation input unit comprises a base (10), a printed board (20) mounted with push button switches (21 to 25) and Hall elements (29a, 29b) on its upper surface and integrally laid on the base (10), an operation member (50) composed of a metal ring (51) integrated with press projections (59a to 59d) and supported on the base (10) vertically movably on the printed board (20), and an operation dial (70) having on its lower surface a ring magnet (65) where N and S poles are alternately arranged and rotatably attached to the upper surface of the operation member (50). When the operation dial (70) is rotated, the variation of the magnetic flux of the ring magnet (65) is detected by the Hall elements (29a, 29b) to detect the rotation direction. When the operation dial (70) is pressed, the push button switches (22 to 25) are operated by means of the press projections (59a to 59d) of the operation member (50).

IPC 8 full level  
**H01H 25/04** (2006.01); **G06F 3/02** (2006.01); **H01H 89/00** (2006.01); **H04M 1/23** (2006.01); **H04W 88/00** (2009.01); **H04W 88/02** (2009.01)

CPC (source: EP KR US)  
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Citation (search report)  
• [A] EP 1394666 A1 20040303 - SONY CORP [JP], et al  
• [A] JP 2003280799 A 20031002 - SONY CORP, et al  
• See references of WO 2007043576A1

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CN113992196A; CN102077154A; EP2259280A3; US2011156931A1; CN102144202A; US9024791B2; WO2010000281A1

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